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## 240 Undergraduates to Present at UC San Diego Summer Research Conference August 14

Topics range from nanolasers to human-robot interactions



*The annual Summer Research Conference, hosted by UC San Diego Academic Enrichment Programs, offers undergraduates from across the region and nation a chance to showcase their faculty-mentored research projects.*

Undergraduate students conducting faculty-mentored research at a San Diego County institution of higher learning will have the opportunity to present their findings this summer to peers, professors and the general public at the annual Summer Research Conference held at the University of California, San Diego on August 14. This year's event will feature more than 240 students from colleges around the region, as well as eight University of California campuses, two dozen universities across the

U.S. and several visiting international students.

“Our goal for this conference is to connect scholars from across the region and nation and provide them an opportunity to not only share their work, but hone their communication skills and confidence levels in preparation for future conferences and graduate school,” said David Artis, dean of Undergraduate Research Initiatives and director of Academic Enrichment Programs at UC San Diego.

Hosted by UC San Diego [Academic Enrichment Programs](#) the annual conference is designed to help students strengthen their presentation skills and form networks with other scholars in their field. Participating students are paired with faculty mentors and research opportunities through UC San Diego's enrichment initiatives such as the [McNair Program](#)—a year-long federal outreach program funded by the U.S. Department of Education that prepares first-

generation, low-income and underrepresented students for doctoral study; the Amgen Scholars Program—a 10-week full-time research experience for undergraduates funded by the Amgen Foundation; among others.

All UC San Diego Academic Enrichment programs aim to encourage students to pursue graduate school and careers in academic research. According to the “Pathways Through Graduate School and Into Careers” report generated by the Council of Graduate Schools and Educational Testing Service, an estimated 2.6 million new and replacement jobs in the U.S. are expected to require an advanced degree by the year 2020, while the number of jobs requiring a doctorate or professional degree is expected to increase by 20 percent.

Research projects cover all academic fields; this year’s topics include learning how risk-taking influences attractiveness, improving nanolasers for optical communication devices, using cyanobacteria as a source of biofuels, examining physiological interactions between humans and robots and more.

Below is a sampling of profiles of UC San Diego students who will be presenting at this year’s Summer Research Conference.

- **Cindy Barrientos—Mapping the Brain**

A first generation college student who grew up near Compton, Calif., Cindy Barrientos transferred to UC San Diego last year to study physiology and neuroscience. A McNair scholar, Barrientos is studying a region of the brain called the ventral pallidum in search of relationships that may shed light on addiction, depression and more. In addition to pursuing academic research after graduating, she strives to inspire other students to realize their potential to become a scientist. “I hope to be a source of strength and encouragement for others who struggle through education—especially those of ethnic and gender minorities who share many of the insecurities that once plagued me.”



*Cindy Barrientos*

- **Cienna Davis—AFROPUNK and Re-Imagining “Blackness”**

A graduating senior at UC San Diego who is majoring in ethnic studies and communications, Davis has developed a 60-page thesis on AFROPUNK, an online cultural movement. Her research investigates how African-Americans utilize cyberspace and social networking as an alternative public space to re-imagine and reconstruct understandings of “blackness.” Davis, a McNair scholar, is excited to share her findings at the conference. “Beyond proving to myself that I am capable of conducting independent research and producing a meaningful argument, this experience has taught me how much graduate programs value research experience.”



*Cienna Davis*

- **Bjorn Wehlin—Superconductivity at the Nanoscale**

Originally from Sweden, Bjorn Wehlin transferred from a small college in Northern California to study applied math at UC San Diego. Working alongside Professor Robert Dynes, University of California president emeritus and former UC San Diego chancellor, Wehlin uses computer simulations to study quantum circuits created by bombarding superconducting materials with nanoscale focused ion beams. A senior, Wehlin has been working on his project for the past two months. “I look forward to discussing my research with others in the field,” he said. “I now have a better understanding of how the research process works and how to navigate research literature.”



*Bjorn Wehlin*

The Summer Research Conference will take place from 8 a.m. to 4 p.m. on August 14 in the Price Center and is open to the campus and local community. In partnership with UC San Diego University Centers, the program will include 35 breakout sessions in 17 rooms throughout the day. Panels will be grouped by topics, and each student presenter will have 15 minutes to share their research, followed by a short question-and-answer period.

UC San Diego Academic Enrichment Programs facilitates numerous initiatives for UC San Diego students that provide research-oriented preparation for undergraduates of all majors as well as assistance in applying for scholarships, fellowships and graduate school. To learn more, go [here](#).

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